REMARKS

Applicant has carefully reviewed the Office Action dated October 27, 2009, and notes with appreciation the indication of allowable subject matter in claims 6 and 17-20. In light of the foregoing amendments and following remarks, it is believed that all pending claims patentably distinguish over the cited references and should be formally allowed.

Initially, original claims 1-23 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner contends that "it is unclear how the acoustic emission is created or formed" in independent claims 1, 13, 17 and 21. *See Office Action dated 10-27-2009, pp. 2-3.* Further, the Examiner contends that clarification is needed for the basis for determining whether an additional amount of agent is required in claim 17.

Contrary to the Examiner's position, the claim language need not state "how the acoustic emission is created or formed" in order to be definite. It is simply not the province of a patent claim to explain **how** something arises or occurs, when it otherwise has proper antecedent basis. In the words of the Federal Circuit, "Specifications teach. Claims claim." *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 n.14 (Fed. Cir. 1985) (*en banc*).

Moreover, the Manual of Patent Examining Procedure (MPEP) § 2173.02 provides that "[d]efiniteness of claim language must be analyzed, not in a vacuum, but in light of: (A) The content of the particular application disclosure; (B) The teachings of the prior art; and (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." As is well known in the art and expressly noted in the specification, "foam consists of cellular structures in which films or cell walls define outer limits of individual bubbles within the foam" and "[d]ue to the instability of the foam, the bubbles often 'break up' or burst...[which] emits transient elastic waves or energy comprising an acoustic emission." See Applicant's Specification, ¶ [0029].

In turn, the passive sensor "detects or 'hears' these types of acoustic emissions and allows their characteristics...to be assessed." *See id.* A skilled artisan would easily understand the nature of the claimed acoustic emission and how it is created. Thus, it is respectfully submitted that claims 1, 13, 17 and 21 are clear and definite.

With respect to claim 17, the Examiner also contends that the basis for determining "whether an additional amount of the agent is required" is indefinite. As amended, claim 17 requires that "determining whether an additional amount of the agent is required <u>based on the detected acoustic emissions</u>." This language is supported by the specification, namely, "a baseline amount of an additive, such as an air entraining agent...may be combined with a test sample forming the foaming substance" and "a sensor associated with this substance communicates with the controller to relay output signals indicative of acoustic emissions as the AEA is added." *See id. at* ¶ [0039]. In turn, "[b]y recording the change in the number of hits as the total amount of AEA increases, the user can determine if the optimal amount of AEA has been added" and "[m]onitoring or analyzing specific frequency ranges and detecting intensity versus time or other process variables assists in defining the interaction of AEA with the mix [and] allows for a determination to be made regarding the amount of AEA to be added." *See id. at* ¶¶ [0040] and [0041].

Finally, the Examiner contends that the phrase "the sample" lacks antecedent basis and the phrase "an amount of the agent proportional to the amount added to the sample" is not clear in claim 20. In response, claim 20 is currently amended to depend from claim 19 (rather than claim 17), so the phrase "the sample" has proper antecedent basis. Further, claim 20 now requires "when an appropriate amount of the agent is added to the mix, creating a larger batch of the mix by adding a second amount of the agent proportional to the appropriate amount of the agent added to the sample." As amended, "the amounts of the agent" are more clearly defined and, thus, the indefiniteness rejection should be withdrawn.

Turning to the merits, original claims 1, 2, 4, 8, 10-14, 16 and 21-23 stand rejected

under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 7,153,396 to Genser ("Genser"). In addition, claims 3, 9 and 15 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Genser in view of either U.S. Patent No. 6,874,256 to Kornfeldt et al. ("Kornfeldt") or U.S. Patent No. 5,469,854 to Unger et al. ("Unger"). Claims 5-7 also stand rejected as allegedly being obvious over Genser in view of U.S. Patent No. 6,484,568 to Griffith et al. ("Griffith").

In order to accept the allowed coverage indicated by the Examiner in the outstanding Action, the subject matter of claim 6 (as well as claim 5 upon which claim 6 is dependent) has been incorporated into independent claims 1 and 21. As a result, claims 5 and 6 are canceled and claim 7 has been amended to depend from claim 1. By virtue of their dependency on claims 1 and 21, claims 7, 22 and 23 are all are also believed to be allowable. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) (holding that if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious). As discussed above, the indefiniteness rejection with respect to independent claim 17 (which the Examiner indicated contained allowable subject matter) have been addressed and, thus, claims 17-20 should also be allowed.

In light of the foregoing, it is now believed that all pending claims are allowable. If any issues remain, the Examiner is encouraged to contact the Applicant's attorney at the telephone number listed below in order to reduce costs and expedite the prosecution of this patent application. To the extent any fees are due for processing this response, the undersigned authorizes their deduction from Deposit Account 11-0978.

Respectfully submitted,

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